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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,625	10/24/2003	Chih-Ping Lee	BHT-3129-128	7189

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BRUCE H. TROXELL  
SUITE 1404  
5205 LEESBURG PIKE  
FALLS CHURCH, VA 22041

EXAMINER
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MANOHARAN, VIRGINIA

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/691,625	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> Virginia Manoharan	<b>Art Unit</b> 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors, e.g., typographical, grammar, idiomatic, syntax and etc. Applicants' cooperations are requested in correcting any errors of which applicants may become aware in the specification.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the check valve connection at the joint portion, i.e., the three way connection specified in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 1-5 are objected to because of the following informalities:

- a). Note typographical error such as "liquidai" recited in claim 1, line 2.
- b). The inconsistent use of terminology in the claims is improper, e.g., "solvent fuel" in line 1 as opposed to the "the gaseous fuel" in line 7 of claim 1.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a). The claims, as framed, are functional to the point of being indefinite inasmuch as the process steps language and the functional language makes the actual structure vague and the true structural limitation for apparatus claims, are difficult to determine. Just as an example: the claimed languages after the "characterized in that" recitation are more process rather than apparatus to which the claims are directed. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. [the float bowl, gate switch and evaporator tank, for example, must be positively recited as structure].

b). The term "characterized in that", recited in claim 1, is not a recitation of positive, manipulative, structural elements of an apparatus. Also, it is unclear whether the limitation(s) recited prior the "characterized in that" is to be regarded as part of

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applicants' invention? Applicants should recite the claim in Jepson -format (if intended) to delineate that which is an improvement in the art.

c). The claimed "the joint portion of said blower, motor outlet.." recited in claim 1 lacks antecedent support.

d). Claims 1-5 are incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the connections e.g., of the evaporator tank, fuel reservoir, blower motor, and liquid fuel controller relative to one another.

e). It is unclear whether the "joint portion" is a three-way connections, i.e., the check valve connected separately to the motor and air inlet pipe?

f). The terms "if" and "stable" in claim 1 both fail to ascertain the claimed invention with precision.

g). It is unclear what constitute the claimed "the predetermined height" within the context of the claimed invention especially since the specification did not specify such height.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2 and 3 of copending Application No. 10/266,770 in view of Shurtleff (5,795,462) or Vankouwenberg et al (5,582,690).

The subject matter of the instant claim is covered in the above co-pending application and vice versa. The scale graduation tube recited in the above co-pending application is deemed to be an alternative of the instant claim liquidal fuel level controller, at least in function of regulating the amount of fuel supply. Nonetheless, either Shurtleff or Vankouwenberg suggests that the claimed liquid fuel level controller with float bowl and switches for maintaining the level of the evaporation tank at a predetermined height is known in the art. This is a provisional obviousness-type double patenting rejection.

Claims 1-3 are rejected under the judicially created doctrine of double patenting over claims 2 and 3 of U. S. Patent No. 10/266,770 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: an evaporation apparatus for solvent fuel comprising an evaporation tank, a fuel reservoir, and a liquid fuel level controller, wherein a pressure switch and a gaseous fuel exit are installed at the top of said evaporation tank, one end of the blower connected to air inlet pipe to introduce the air to

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the apparatus, and a check valve is installed in said air inlet pipe for preventing backflow of the air and the gaseous fuel.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 rejected under 35 U.S.C. 103(a) as being unpatentable over anyone of DE 20118966, Rhodes (5,772,843, Travis (5,082,525) or Erickson (4,534,828).

Anyone of the above references discloses substantially the apparatus as claimed. See the abstract of DE '966; the claims at cols. 8-10 of Rhodes; the claims at

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cols. 9-12 of Travis; and the claims at cols. 8-10 of Erickson. The apparatus of anyone of the above references differs from the claimed invention in that claim 1, lines 10-18, for example, recites that "...air is introduced into said evaporation tank from said fuel reservoir via said air inlet, said liquidal fuel level equipped in the lower portion of said evaporation tank is composed of a float bowl and a gate switch, said float bowl detects the fuel level and actuates said gate switch for regulating amount of fuel supply, thereby maintaining the fuel level in said evaporation tank at a predetermined height and achieving stable evaporation effect, the variation of fuel level never affects the evaporation effect or combustion efficiency.."

However, the above limitation is deemed not to constitute a patentable distinction because it does not define any element of an apparatus to which the claims are directed; and as such cannot be distinguished from the prior art in the structural sense.

[The above limitation is more process, but a process limitation is not the basis of patentability of an apparatus claim]. Nonetheless, Shurtleff or Vankouwenberg discloses the features of the apparatus recited after the "characterized in that" e.g., the float bowl and the gate switches. To incorporate the specific control devices taught in Shurtleff or Vankouwenberg to the apparatus of anyone of the above references would have been obvious to one of ordinary skill in the art for a safe operation of the apparatus. Note e.g, col. 8, lines 20-33 of the Shurtleff's reference.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a): Gregory and Yates both disclose an evaporator system



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b). Oested discloses a method and apparatus for providing inert gas to prevent fires and explosion.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is (571) 272-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VM

July 25, 2005

  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
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